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INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)



Applicant's or agent's file reference WOP0268	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB 03/03659	International filing date (day/month/year) 21.08.2003	Priority date (day/month/year) 14.09.2002
International Patent Classification (IPC) or both national classification and IPC A47L9/00		
Applicant DYSON LTD et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 7 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 5 sheets.

3. This report contains indications relating to the following items:
- I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 24.03.2004	Date of completion of this report 22.11.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Papadimitriou, S Telephone No. +49 89 2399-2760 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/GB 03/03659**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-5, 7-14 as originally filed
6 received on 10.09.2004 with letter of 06.09.2004

Claims, Numbers

1-24 received on 10.09.2004 with letter of 06.09.2004.

Drawings, Sheets

1/12-12/12 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3)

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

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5. ☒ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

see separate sheet

6. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application;

☒ claims Nos. 24

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for the said claims Nos. 24

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the Standard.

☐ the computer readable form has not been furnished or does not comply with the Standard.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1,2,6,7
	No: Claims	
Inventive step (IS)	Yes: Claims	2,7
	No: Claims	1,6
Industrial applicability (IA)	Yes: Claims	1-24
	No: Claims	

2. Citations and explanations

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see separate sheet

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EXAMINATION REPORT - SEPARATE SHEET**

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Re Item I

Basis of the report

1. Independent claims 1 and 6

- 1.1 Subsisting independent claim 1 does not specify that the hose passes at least once around the main body when the wand is attached thereto (part of originally filed dependent claim 2).

Subsisting independent claim 6 does not specify that there are retaining means located in the channel (part of originally filed dependent claim 7).

Consequently, the amendments filed with the letter dated 06.09.04 are directed to embodiments not supported by the originally filed documents and as such introduce subject-matter which extends beyond the content of the application as filed, contrary to Article 34(2)(b) PCT.

- 1.2 As the subsisting independent claims contain added subject-matter the present international preliminary examination report was established for compliance of the **originally filed** claims 1-24 with the provisions of Article 33(1) PCT.

Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. Independent claim 24

The subject-matter of claim 24 (corresponding to originally filed claim 25) has not been assessed for compliance with the PCT due to non-establishment of a search report for that claim.

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. State of the art

Reference is made to the following documents:

D1: GB-A-2304029

D2: US-A-5584436

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D3: DE-U-6752338

2. Independent claim 1

- 2.1 In the terms of claim 1, document D1 discloses a cleaning appliance of the cylinder type (cf. figs. 2A and 3) comprising a main body (20) and a hose and wand assembly (18,30), the hose and wand assembly comprising a wand (30) and a flexible hose (18) having a "first" end connected to the main body and a "second" end connected to the wand (cf. fig. 2A), wherein the wand and the main body incorporate retaining means (2 - fig. 1) for selectably attaching the wand to the main body (cf. fig. 3) when the wand is in the non-operating state and the hose passes around the main body (cf. figs. 2A and 3).
- 2.2 It is to be noted that the claim is silent on whether the second end of the hose is connected to the wand in the stored position of the hose/wand assembly. In line 6 of the claim the second end is not defined as being **permanently** connected to the wand which implies that the hose's "second" end may be connected to the wand only during normal use of the appliance.
- 2.3 The appliance subject-matter of independent claim 1 differs from the one disclosed in D1 in that the claimed appliance comprises a telescopic wand which is retained to the main body in the retracted state.
- 2.4 The objective technical problem underlying the present application is therefore the modification of the appliance of D1 to provide to a prospective user a greater flexibility during cleaning operations. This objective technical problem is apparently solved by the provision of a telescopic wand which in its retracted state is retained to the main body of the appliance.
- 2.5 The use of a telescopic wand in a cleaning appliance is well known to the skilled person, as shown for example in D3. The replacement of the wand of the appliance of D1 by such a telescopic wand would therefore be obvious to a skilled person. In so doing the skilled person would arrive at the subject-matter of current claim 1.
- 2.6 Therefore, the present application does not comply with the provisions of Article 33(3) PCT because the subject-matter of **originally filed** independent claim 1 does not involve an inventive step in respect of prior art as defined in the

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regulations (Rule 65 PCT).

3. Independent claim 7

3.1 In the terms of claim 7, document D2 discloses a cleaning appliance (col. 1, line 12) of the cylinder type (10) comprising a main body (12) and a hose and wand assembly (26,14), the hose and wand assembly comprising a wand (14) movable between retracted and extended positions (cf. figures 1 and 2) and a flexible hose (26) having a "first" end (30) connected to the main body (12) and a "second" end connected to the wand (cf. col. 3, lines 20-23), wherein the wand and the main body incorporate retaining means (42,44,46) for selectably attaching the wand to an upper surface of the main body (cf. fig. 3) when the wand is in the retracted state (cf. col. 3, lines 49-58).

3.2 The upper surface of the main body of the cleaning appliance is understood in connection with the disposition of the appliance during its normal use.

3.3 The appliance subject-matter of independent claim 7 differs from the one disclosed in D2 by the technical feature set out in § 2.3 above. The arguments set out in § 2.4 and 2.5 above apply mutatis mutandis for claim 7.

3.4 Consequently, the present application does not comply with the provisions of Article 33(3) PCT because the subject-matter of **originally filed independent claim 7** does not involve an inventive step in respect of prior art as defined in the regulations (Rule 65 PCT).

4. Dependent claims 2 and 8

The combination of the features of originally filed dependent claims 2 and 8 are neither known from, nor rendered obvious by, the available prior art.

anchor the hose 150 to the machine at a central position (as with anchor point 25 in the machine shown in Figure 1) so that when a user pulls the hose 150, the main body 100 follows the user.

- 5 Ducting on the chassis 110 connects the air inlet port 151 to an inlet to the separating apparatus 120. For a cyclonic separating apparatus 120, the inlet to the separating apparatus is arranged to guide incoming airflow through the wall of the chamber of the cyclonic separator in a tangential manner.
- 10 The second end of the hose 150 connects to the wand 160. A suitable wand assembly 160 is described in our co-pending International Patent Application WO 02/071913. As shown in Figure 4, the wand comprises a set of three tubes 161, 162, 163 of progressively decreasing diameter. The tubes 161, 162, 163 can telescope inside one another and are retractably housed inside a storage tube 165. The three tubes 161, 162, 15 163 are slideable inside one another and can be moved between a stored position (as best shown in Figure 6) and an extended position (as shown in Figure 4) in which one tube is extended from another such that only the ends of the tubes overlap one another. Securing mechanisms 400 secure the tubes in an extended position. The precise arrangement of the securing mechanisms does not form part of the present invention and 20 so will not be described in any further detail here. Tubes 161, 162, 163 are progressively longer in length. The length of each tube is chosen so that it fully occupies the available space within the storage tube 165 when the securing mechanisms 400 are lying alongside one another.
- 25 The distal end of tube 163 has a connector 280 which is adapted to receive a floor tool, such as the floor tool shown 20 in Figure 1, in any known manner. For example, the floor tool can be connected to the tube 163 by means of an interference fit, interconnecting bayonet fittings, snap-fit connections, a screw threaded collar and sleeve, or by any other suitable means. Accessory tools may also be fitted to the tube 163 in 30 place of the floor tool. A handle 200 is located on the storage tube 165 to allow a user

Claims

1. A cleaning appliance of the cylinder type comprising a main body and a hose and wand assembly, the hose and wand assembly comprising a telescopic wand movable
5 between retracted and extended positions and a flexible hose having a first end connected to the main body and a second end connected to the wand, wherein the wand and the main body incorporate retaining means for releasably attaching the wand to the main body when the wand is in the retracted state and the hose passes at least once around the main body.
10
2. A cleaning appliance as claimed in claim 1, wherein the hose passes more than once around the main body when the wand is attached thereto.
3. A cleaning appliance as claimed in claim 1 or 2, wherein the hose follows a
15 predetermined path around the main body when the wand is attached thereto.
4. A cleaning appliance as claimed in claim 1 or 2, wherein the hose is retained in a fixed position with respect to the main body at a plurality of points along the length of the hose.
20
5. A cleaning appliance as claimed in any one of the preceding claims, wherein the main body comprises a cyclonic separator having a collecting bin for collecting dirt and debris and the wand is releasably attachable to the collecting bin.
- 25 6. A cleaning appliance of the cylinder type comprising a main body and a hose and wand assembly, the hose and wand assembly comprising a telescopic wand movable between retracted and extended positions and a flexible hose having a first end connected to the main body and a second end connected to the wand, wherein the wand and the main body incorporate retaining means for releasably attaching the wand to an upper

surface of the main body when the wand is in the retracted state and the upper surface of the main body comprises a channel for receiving the wand.

7. A cleaning appliance according to claim 6, wherein the retaining means are
5 located in the channel.

8. A cleaning appliance according to claim 7, wherein the main body comprises two
generally cylindrical containers lying next to one another and wherein the channel lies
between the cylindrical containers.

10

9. A cleaning appliance as claimed in any one of claims 6 to 8, wherein the channel
has a sufficient depth to allow the wand to lie substantially flush with the upper surface
of the main body when the wand is received in the channel.

15 10. A cleaning appliance as claimed in any one of the preceding claims, wherein the
wand has a handle by means of which a user may lift the main body when the wand is
attached thereto.

11. A cleaning appliance as claimed in claim 10, wherein the said handle may also be
20 used by the user to manipulate the hose and wand assembly during normal use.

12. A cleaning appliance as claimed in claim 10 or 11, wherein the handle extends in
a direction which is substantially parallel to the longitudinal axis of the wand so as to
provide a plurality of longitudinally offset positions for lifting the main body and for
25 manipulating the hose and wand assembly.

13. A cleaning appliance as claimed in any one of the preceding claims, wherein the
wand may be attached to the main body when the main body is oriented for normal use.

14. A cleaning appliance as claimed in claim 13, wherein the main body has wheels or rollers arranged so as to allow the main body to move across a surface to be cleaned and the said wheels or rollers remain in contact with the surface when the wand is attached to the main body.

5

15. A cleaning appliance as claimed in any one of the preceding claims, wherein a substantial part of the length of the wand, in the retracted position, lies alongside the main body when the wand is attached thereto.

10 16. A cleaning appliance as claimed in claim 15, wherein substantially all of the wand, in the retracted position, lies alongside the main body when the wand is attached thereto.

15 17. A cleaning appliance as claimed in any one of the preceding claims, further comprising rotation prevention means for preventing rotation of the wand when it is attached to the main body.

20 18. A cleaning appliance as claimed in claim 17, wherein the rotation preventing means comprises a first part, mounted on the main body, and a second part mounted on the wand, each part having a face which extends radially with respect to the longitudinal axis of the wand.

25 19. A cleaning appliance as claimed in any one of the preceding claims, wherein the hose and wand assembly carries a release member for releasing the wand from the main body.

20. A cleaning appliance as claimed in claim 19, wherein the wand comprises locking means for locking the wand in the retracted position and actuation of the release member also releases the said locking means.

21. A cleaning appliance as claimed in any one of the preceding claims, wherein the first and second ends of the hose are located adjacent one another when the wand is attached to the main body.
- 5 22. A cleaning appliance as claimed in any one of claims 1 to 20, wherein the first and second ends of the hose are circumferentially spaced apart from one another when the wand is attached to the main body.
- 10 23. A cleaning appliance as claimed in any one of the preceding claims, wherein the cleaning appliance takes the form of a vacuum cleaner.
24. A cleaning appliance substantially as described herein with reference to the accompanying drawings.

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